



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/057,516	01/24/2002	Joel L. Wolf	YOR920010066US1 (8728-533)	4326
46069 7590 07/03/2007 F. CHAU & ASSOCIATES, LLC 130 WOODBURY ROAD WOODBURY, NY 11797			EXAMINER MEUCCI, MICHAEL D	
			ART UNIT 2142	PAPER NUMBER
			MAIL DATE 07/03/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/057,516

Applicant(s)

WOLF ET AL.

Examiner

Michael D. Meucci

Art Unit

2142

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 April 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,4-7,9,10,12-15 and 17 is/are rejected.
- 7) ☒ Claim(s) 3,8,11 and 16 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 June 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application
- ☐ Other: _____

DETAILED ACTION

1. This action is in response to the request for reconsideration filed 12 April 2007.
2. Claims 1-17 remain pending.

Claim Objections

3. The applicant should correct inconsistencies in the claim language such as maintaining conformity of the claim language. Examples of this are the use of "web site" and "website" in claim 1. Correction is required.
4. Claims 3, 8, 11, and 16 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-2, 7, 9-10, and 15 rejected under 35 U.S.C. 103(a) as being unpatentable over Carlson (U.S. 6,697,849 B1) in view of Pulley et al. (U.S. 2002/0087679 A1) hereinafter referred to as Pulley.

Art Unit: 2142

a. As per claims 1 and 9, Carlson teaches: receiving a customer request for accessing a target web site of the web farm (line 67 of column 14 through line 3 of column 15); categorizing the received customer request for the target web site as either (i) a shareable customer request which can be processed by a server assigned to another website of the web farm or (ii) an unsharable customer request which can not be processed by a server assigned to another website in the web farm (line 65 of column 14 through line 10 of column 15, lines 29-36 of column 15, and Fig. 14) [wherein "sticky" requests are regarded as the unshareable customer requests]; if the received customer request for the target website is categorized as a shareable customer request, routing the customer request to a server assigned to another website which can process the received customer request (lines 47-57 of column 12, line 66 of column 13 through line 6 of column 14, lines 36-48 of column 14, and Fig. 7); and if the received customer request for the target website is categorized as an unshareable customer request, routing the customer request to a server specifically assigned to the target website for processing (lines 11-28 of column 15).

Carlson does not explicitly teach: providing a web farm comprising a plurality of different web sites and a plurality of web servers, wherein each web site is assigned to a set of one or more of the web servers. Pulley discloses: "Finally, servers that support multiple different websites can use the active controls 106 to transmit the hit level data to different instrumentation servers for each such different website, by using different active control content," (paragraph [0079] on page 6). It would have been obvious for one of ordinary skill in the art at the time of the applicant's invention to provide a web

Art Unit: 2142

farm comprising a plurality of different web sites and a plurality of web servers, wherein each web site is assigned to a set of one or more of the web servers. "Thus, each web server would need to be running one instance of the web server filter," (paragraph [0067] on page 5 in Pulley). It is for this reason that one of ordinary skill in the art at the time of the applicant's invention would have been motivated to provide a web farm comprising a plurality of different web sites and a plurality of web servers, wherein each web site is assigned to a set of one or more of the web servers in the system as taught by Carlson.

b. As per claims 2 and 10, Carlson teaches: a Goal procedure comprising determining, for each said customer request, an optimal server from among said servers to which each said customer request is to be assigned so as to minimize an average customer response time at any given moment, given said assignment of said websites to said servers and a current customer request load (lines 12 of column 11 through line 26 of column 12, line 36-63 of column 14, and Fig. 5).

c. As per claims 7 and 15, Carlson teaches: examining the next customer request; invoking said Goal procedure in order to determine which server is the optimal server to currently process said next customer request; and dispatching said next customer request to said optimal server (lines 59-67 of column 4 lines 47-57 of column 12, Fig. 8, and Fig. 9).

7. Claims 5 and 13 rejected under 35 U.S.C. 103(a) as being unpatentable over Carlson and Pulley as applied to claim 1 above, in view of Lomet (U.S. 5,806,065).

Art Unit: 2142

Carlson does not explicitly teach: the static procedure assigning specific websites to specific servers for the purpose of processing unsharable customer requests.

However, Lomet discloses: "The data is distributed over the servers according to a distribution policy that specifies which server site is to host a new data page. Example distribution policies include opportunistic, randomized, and range. An 'opportunistic' distribution policy chooses the same server site at which the node is split as the site to host the new page created by the node split," (lines 38-44 of column 15). It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to have the static procedure assign specific websites to specific servers for the purpose of processing unsharable customer requests. "This policy reduces communications cost by keeping the split pages together at the same site. In a 'randomized' distribution policy, the server site chosen for any newly created page is based on a randomization process that uniformly distributes the load across all of the sites," (lines 44-48 of column 15 in Lomet). It is for this reason that one of ordinary skill in the art at the time of the applicant's invention would have been motivated to have the static procedure assign specific websites to specific servers for the purpose of processing unsharable customer requests in the system as taught by Carlson.

8. Claims 6 and 14 rejected under 35 U.S.C. 103(a) as being unpatentable over Carlson, Pulley, and Lomet as applied to claim 5 above, further in view of Gilbert et al. (U.S. 6,771,595 B1) hereinafter referred to as Gilbert.

Art Unit: 2142

Carlson does not explicitly teach: the static procedure assigns websites to specific servers based upon forecasted demand for customer requests from each said website. However, Gilbert discloses: "An expert system 33 is used by the resource controller 34 to allocate network resources according to predicted future traffic patterns," (lines 46-48 of column 3). It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to have the static procedure assign websites to specific servers based upon forecasted demand for customer requests from each website. "Future resource allocation is based on traffic patterns currently being monitored by the statistic monitoring agent," (lines 48-50 of column 3 in Gilbert). It is for this reason that one of ordinary skill in the art at the time of the applicant's invention would have been motivated to have the static procedure assign websites to specific servers based upon forecasted demand for customer requests from each website in the system as taught by Carlson and Lomet.

9. Claim 17 rejected under 35 U.S.C. 103(a) as being unpatentable over Carlson in view of Pulley and Lomet.

Carlson teaches: means for receiving customer requests from customer (abstract and lines 40-43 of column 4); means for processing said customer requests to produce responses (abstract and lines 29-52 of column 5); means for transmitting said responses to said customers (abstract); means for categorizing said customer requests into shareable customer requests and unshareable customer requests (line 65 of column 14 through line 10 of column 15, lines 29-36 of column 15, and Fig. 14) [wherein

Art Unit: 2142

"sticky" requests are regarded as the unshareable customer requests]; a network dispatcher comprising means for procedure, and a dynamic procedure (abstract, Fig. 1, and Fig. 2A-2C); said Goal procedure comprising determining, for each said customer request, an optimal server from among said servers to which each said customer request is to be assigned so as to executing a goal procedure, a static minimize an average customer response time at any given moment, given said assignment of said websites to said servers and a current customer request load, wherein said shareable customer requests may be assigned to any said server and wherein said unshareable customer requests may only be assigned to specific servers depending on which said website said unshareable customer request originated (lines 12 of column 11 through line 26 of column 12, line 36-63 of column 14, and Fig. 5); and said dynamic procedure comprising: examining the next customer request; involving said Goal procedure in order to determine which server is the optimal server to currently process said next customer request; and dispatching said next customer request to said optimal server (lines 59-67 of column 4 lines 47-57 of column 12, Fig. 8, and Fig. 9).

Carlson does not explicitly teach: the requests are received from a plurality of websites. However, Pulley discloses: "This also allows for more streamlined aggregation when web farms are used, as all of the hits that are transmitted to all of the different servers of the web farm for the page information generate hit level data at the same instrumentation server," (paragraph [0079] on page 6). It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to have the requests received from a plurality of websites. "Thus, rather than having to access

Art Unit: 2142

data from each of the different servers of the web farm, data can be accessed from a single instrumentation server. Finally, servers that support multiple different websites can use the active controls 106 to transmit the hit level data to different instrumentation servers for each such different website, by using different active control content,” (paragraph [0079] on page 6 of Pulley). It is for this reason that one of ordinary skill in the art at the time of the applicant’s invention would have been motivated to have the requests received from a plurality of websites in the system as taught by Carlson.

Carlson does not explicitly teach: said static procedure comprising assigning specific said websites to specific said servers. However, Lomet discloses: “The data is distributed over the servers according to a distribution policy that specifies which server site is to host a new data page. Example distribution policies include opportunistic, randomized, and range. An ‘opportunistic’ distribution policy chooses the same server site at which the node is split as the site to host the new page created by the node split,” (lines 38-44 of column 15). It would have been obvious to one of ordinary skill in the art at the time of the applicant’s invention to have the static procedure assign specific websites to specific servers. “This policy reduces communications cost by keeping the split pages together at the same site. In a ‘randomized’ distribution policy, the server site chosen for any newly created page is based on a randomization process that uniformly distributes the load across all of the sites,” (lines 44-48 of column 15 in Lomet). It is for this reason that one of ordinary skill in the art at the time of the applicant’s invention would have been motivated to have the static procedure assign specific websites to specific servers in the system as taught by Carlson.

Allowable Subject Matter

10. The following is a statement of reasons for the indication of allowable subject matter: The functions disclosed in claims 3, 8, 11, and 16 pertaining to the goal procedure could not be found in the prior art.

Response to Arguments

11. Applicant's arguments with respect to claims 1, 9, and 17 have been considered but are not persuasive.

12. (A) Regarding claims 1, 9, and 17 the applicant contends that neither Carlson nor Pulley teach or suggest processing access request for target web sites of a web farm which maintains a plurality of different websites and which has a plurality of shared server resources for processing access requests. The examiner respectfully disagrees.

As to point (A), the applicant argues that Carlson discloses nothing more than a method of load balancing among a plurality of backend application servers for a given website and that Carlson does not teach multiple websites. The examiner agrees with this last assertion and points out that the Carlson reference was not relied upon for the rejection of this limitation. The examiner explicitly points to the rejection above which states: Pulley discloses: "Finally, servers that support multiple different websites can use the active controls 106 to transmit the hit level data to different instrumentation servers for each such different website, by using different active control content

Art Unit: 2142

(paragraph [0079] on page 6). From this citation, one of ordinary skill in the art at the time of the applicant's invention would have easily recognized the advantages of having the web servers process requests for multiple web sites. As such, the rejection remains proper and is maintained by the examiner.

13. (B) In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

14. (C) Regarding the applicant's arguments pertaining to the "sticky requests," the arguments fail to comply with 37 CFR 1.111(b) because they amount to a general allegation that the claims define a patentable invention without specifically pointing out how the language of the claims patentably distinguishes them from the references.

Conclusion

15. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not

Art Unit: 2142

mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

16. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Liu et al. (U.S. 2002/0198995 A1) discloses sharing requests between servers.

17. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Meucci at (571) 272-3892. The examiner can normally be reached on Monday-Friday from 9:00 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Caldwell, can be reached at (571) 272-3868. The fax phone number for this Group is 571-273-8300.

Communications via Internet e-mail regarding this application, other than those under 35 U.S.C. 132 or which otherwise require a signature, may be used by the applicant and should be addressed to [michael.meucci@uspto.gov].

All Internet e-mail communications will be made of record in the application file. PTO employees do not engage in Internet communications where there exists a possibility that sensitive information could be identified or exchanged unless the record

Art Unit: 2142

includes a properly signed express waiver of the confidentiality requirements of 35 U.S.C. 122. This is more clearly set forth in the Interim Internet Usage Policy published in the Official Gazette of the Patent and Trademark on February 25, 1997 at 1195 OG 89.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



ANDREW CALDWELL
SUPERVISORY PATENT EXAMINER